

Marked-Up Version Showing Changes Made to the Claims

Kindly amend the claims as follows:

1. (Twice Amended) A method for producing a plasma display, comprising the step of continuously applying a phosphor paste containing a phosphor powder and an organic compound onto a substrate ~~with~~ having a plurality of barrier ribs formed thereon at a pitch of 360 μ m or less, from a paste applicator with a plurality of outlet holes, arranged inline having a length of 288 mm or more, to form a phosphor layer, ~~wherein the~~ having a lateral side wall thickness (T1) of the phosphor layer at the position corresponding to a half of the height of each barrier rib and ~~the~~ having a bottom wall thickness (T2) of the phosphor layer, wherein the thicknesses (T1) and (T2) satisfy the following relationship:

$$10 \leq T1 \leq 50 \mu\text{m}$$

$$10 \leq T2 \leq 50 \mu\text{m}$$

$$0.2 \leq T1/T2 \leq 5.$$

2. (Three Times Amended) A method for producing a plasma display, comprising the steps of coating a substrate ~~with~~ having a plurality of adjacent barrier ribs formed at a pitch of 360 μ m or less, with three phosphor pastes, each said coating containing a phosphor powder emitting light of red, green or blue, as stripes in the spaces between ~~the~~ said respectively adjacent barrier ribs, from a paste applicator ~~with~~having outlet holes formed in line having a length of 288 mm or more, and heating said paste to form a phosphor layer, wherein ~~the~~said layer has a lateral side wall thickness (T1) of the phosphor layer at the position corresponding to a half of the height of each barrier rib and the bottom wall thickness (T2) of the said phosphor layer satisfy the following ~~relation~~relationship:

$$10 \leq T1 \leq 50 \mu\text{m}$$

$$10 \leq T2 \leq 50 \mu\text{m}$$

$$0.2 \leq T1/T2 \leq 5.$$

3. (Twice Amended) A method for producing a plasma display, according to claim 1 or 2, wherein a space (S) between said adjacent barrier ribs and the average diameter (D) of said the outlet holes satisfy the following formula:

$$10 \mu\text{m} \leq D \leq S \leq 500 \mu\text{m}.$$

7. (Twice Amended) A method for producing a plasma display, according to claim 1 or 2, wherein ~~the~~ said paste applicator has a total of $16n \pm 5$, wherein (n is a natural number) outlet holes.

11. (Twice Amended) A method for producing a plasma display, according to Claim 1 or 2, wherein the average diameter (D) of said outlet holes is 60 to 400 μm .

12. (Twice Amended) A method for producing a plasma display, according to claim 1 or 2, wherein ~~the~~ said barrier ribs have top surfaces, and wherein said phosphor pastes are applied while the distance between ~~the~~ said top surfaces of the barrier ribs are formed on a glass substrate, and wherein the tips tip of the each said outlet holes of the paste applicator is kept at 0.01 to 2 mm from said top surfaces.

13. (Twice Amended) A method for producing a plasma display, according to claim 1 or 2, wherein ~~said~~ phosphor pastes capable of emitting different colors are discharged from one paste applicator, and wherein the shortest distance between the outlet holes that are connected for applying said phosphor pastes that are mutually different in color, is 600 μm or more.

19. (Twice Amended) A method for producing a plasma display, according to Claim 1 or 2, wherein ~~after the~~ said paste applicator and ~~the~~ said substrate ~~have begun~~ undergo movement relative to each other in parallel to the barrier ribs on the substrate, the jet application of phosphor pastes is started, and before ~~the~~ that relative movement is stopped, ~~the~~ said jet application is stopped.

20. (Three Times Amended) A method for producing a plasma display, according to Claim 1 or 2, wherein 50 wt% grain size of each of the said phosphor powders is 0.5 to 10 μm , and wherein the specific surface area of each of the said phosphor powders is 0.1 to 2 m^2/g .

24. (Twice Amended) A method for producing a plasma display in which three phosphor pastes each comprising a phosphor powder emitting light of red, green or blue are applied to the spaces between adjacent barrier ribs on a glass substrate, to form a phosphor plane layer, according to claim 2, wherein phosphor paste existing outside predetermined coating positions are removed from said barriers by adhering said phosphor paste to an adhesive material.

25. (Twice Amended) A method for producing a plasma display, according to claim 1 or 2, wherein phosphor paste deposited at top surfaces of the barrier ribs is removed by adhering said phosphor paste to an adhesive material.

29. (Twice Amended) A method for producing a plasma display, according to claim 28, wherein each of the said photosensitive phosphor pastes ~~have~~ has the following composition:

Organic component : 15 ~ 60 parts by weight

Phosphor powder : 40 ~ 85 parts by weight

Solvent : 10 ~ 50 parts by weight.

30. (Twice Amended) A method for producing a plasma display, according to claim 1 or 2, wherein said barrier ribs are provided as stripes having the following dimensions:

Pitch : 100 ~ 250 μm

Width : 15 ~ 40 μm

Height: 60 ~ 170 μm .

33. (Three Times Amended) An apparatus for producing a plasma display, comprising a table for fixing a substrate with a plurality of barrier ribs formed on the substrate surface, a paste applicator ~~with a~~ having a plurality of outlet holes formed in line of 288mm or more to face the barrier ribs of the substrate, wherein the average diameter (D) of the outlet holes of the paste applicator and the length (L) of each of the outlet holes satisfy the following ~~relation~~ relationship:

$$L/D = 0.1 \sim 600;$$

wherein a phosphor paste supply is operatively connected to the paste applicator, and a moving actuator for three-dimensionally moving ~~the table~~ and ~~the~~ said paste applicator relative to each other; and

a positioning controller operative and effective to adjust the angle of inclination of ~~the~~ said paste applicator to top surfaces of said barrier ribs of the substrate, while keeping tips of the outlet holes of ~~the~~ said paste applicator at a predetermined distance from the barrier ribs of the substrate.

35. (Twice Amended) An apparatus ~~for producing a plasma display~~, according to claim 33, wherein the outlet holes of the paste applicator are ~~not circularly formed~~, non-circular in cross section, and the length (B) of each of the holes almost perpendicular to the barrier ribs and a space (S) between the adjacent barrier ribs satisfy the following ~~relation~~ relationship:

$$10 \mu\text{m} \leq B \leq S \leq 500 \mu\text{m}.$$

44. (Twice Amended) An apparatus ~~for producing a plasma display~~, according to claim 33, wherein the centers of the outlet holes of the paste applicator are located above the spaces between the adjacent barrier ribs.

49. (Three Times Amended) An apparatus for producing a plasma display, according to claim 33, wherein a plurality of paste applicators are provided for different

phosphor pastes, and a plurality of phosphor paste supply devices are provided to supply the phosphor pastes for the respective paste applicators, so that spaces between the barrier ribs of the substrate may be simultaneously coated with the plurality of phosphor pastes.

51. (Three Times Amended) An apparatus for producing a plasma display, according to claim 33, wherein a detecting means is provided for detecting the positions of the outlet holes of ~~the~~ said paste applicator, and wherein a detecting means for detecting the positions of the barrier ribs or the spaces between the barrier ribs of the substrate, a detecting means for detecting the position of top surfaces of the barrier ribs on the substrate, a detecting means for detecting the ~~position~~ positions of tips of the outlet holes of the paste ~~applicator~~ applicators, and a control means for controlling the start and end of applying of the phosphor paste in response to the relative ~~position~~ positions between the outlet holes of the paste ~~applicator~~ applicators and the substrate, are provided.

55. (Three Times Amended) An apparatus for producing a plasma display, according to claim 33, wherein a reference mark detecting means is provided for detecting a reference mark on the substrate, and wherein a moving means and control means for moving the paste applicator and the barrier ribs relative to each other so that the outlet holes of the paste applicator may be located above spaces between the barrier ribs to be coated with the phosphor paste, are provided.

58. (Three Times Amended) An apparatus for producing a plasma display, comprising three coating devices provided in series to ~~respond to~~ deliver three phosphor pastes are provided, said coating devices each being equipped with a table for fixing a substrate ~~with~~ having barrier ribs, a paste applicator with a plurality of outlet holes arranged to face the barrier ribs of the substrate, a supply means for supplying phosphor pastes to the paste applicator, and wherein a moving means for three-dimensionally moving the table and the paste applicator relative to each other, are provided.